

Appl. Serial No.: 09/978,118  
Response to Office Action Dated  
August 5, 2005

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## REMARKS / DISCUSSION OF ISSUES

Claims 1-24 are pending in the application. Claims 1, 7, 13, 15 and 21 are in independent form.

### **Objections to the Claims**

Claims 1-6 and 14 are rejected due to informalities. Claim 1 has been amended to overcome the objection raised. This obviates the objection to claims 1-6.

Claim 14 has not been amended. From a review of at least pages 11-12 of the filed application, the matrices in question are described in detail. It is respectfully submitted that the objection to claim 14 is improper and should be withdrawn.

### **Objections to the Drawings**

The drawings are objected to as being informal. Formal drawings will be provided in a separate filing in due course. The Examiner's recommendations will be followed wherever practical. Finally, Applicants note that N<sub>s</sub> and N<sub>p</sub> are described at least at page 11 of the filed application. Thus withdrawal of this objection is respectfully requested.

### **Rejections under 35 U.S.C. § 103**

1. Claims 1, 4-7, 10-13, 15 and 18-24 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Lee (U.S. Patent 5,414,699). For at least the reasons set forth below, it is respectfully submitted that the rejected claims are patentable over the applied art.

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A proper rejection under 35 U.S.C. § 103(a) requires that all of the claimed elements be found in the applied art. If a single claimed element is not found in the applied art, a *prima facie* case of obviousness cannot be properly established.

Furthermore, obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is reason, suggestion or motivation to do so found in the references themselves or in the knowledge generally available to one of ordinary skill in the art. However, hindsight is never an appropriate motivation for combining references.

Claim 1 is drawn to a method for communicating information symbols in a Direct Sequence-Code Division Multiplex communication system (DS-CDMA). The method features: "...generating a pilot sequence for synchronizing communication between said base and said mobile users and transmitting said pilot sequence with said signal over said single channel..."

Claims 7, 13, 15 and 21 include a similar feature.

Applicants respectfully submits that the reference to Lee lacks at least the referenced feature of the independent claims. First, it is noted that the reference to Lee discloses a plurality of CDMA transmitters 10 that transmit DS-SS signals. There is no teaching or suggestion of the transmission over a single channel, nor has the Office Action directed Applicants to such a teaching in Lee.

For at least the reason set forth above, it is respectfully submitted that the reference to Lee lacks at least one feature of independent claims 1, 7, 13, 15 and 21. Therefore a *prima facie* case of obviousness has not been

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properly made. For at least this reason, withdrawal of the present rejection is earnestly solicited.

The above notwithstanding, Applicants respectfully submit that the Examiner is attempting to cobble a rejection using Applicants' disclosure as a template for its own reconstruction. To this end, the Office Action acknowledges that the reference to Lee lacks the disclosure of a pilot signal. The Office Action attempts to equate the training sequence of Lee with the pilot signal, indicating that the training sequence of Lee performs the same function as that of the pilot signal.

First, it is noted that obviousness cannot be established because one feature of a reference performs the same function; rather the reference or knowledge generally available to one of ordinary skill in the art must provide that which is claimed. For at least this reason alone, this rejection is improper and should be withdrawn.

The above notwithstanding, it is respectfully submitted that the claimed pilot sequence differs from the training sequence of Lee. The training sequence 31 of Lee is a redundant sequence used at the receiver to determine the despreading chip sequence. The training sequence is followed by a synchronization sequence used to synchronize the receiver and transmitter bit timing. Thus, the training sequence is not used for synchronization; rather the synchronization sequence performs this function. (Kindly refer to column 4, lines 28-57 of Lee for support for the above assertion.)

Contrastingly, one user comprises a pilot sequence 15. The pilot sequence is transmitted via a pilot signal. The pilot signal is transmitted over the communications

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system for synchronization as described in the filed application.

For at least the reasons set forth above, it is respectfully submitted that the rejection of independent claims 1, 7, 13, 15 and 21 is improper and should be withdrawn. Therefore claims 1, 7, 13, 15 and 21, and the claims that depend therefrom are allowable over the applied art. Allowance is earnestly solicited.

2. Claims 2-3, 8-9 and 16-17 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Lee (U.S. Patent 5,414,699) in view of Caire, et al. While in no way conceding to the propriety of this rejection, Applicants respectfully submit that these claims are allowable over the applied art at least because of their dependence on independent claims. For at least the reasons set forth above the independent claims are believed to be allowable over the applied art.

#### Conclusion

In view of the foregoing, applicant(s) respectfully request(s) that the Examiner withdraw the objection(s) and/or rejection(s) of record, allow all the pending claims, and find the application in condition for allowance. If any points remain in issue that may best be resolved through a personal or telephonic interview, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and further replies to charge payment or credit any overpayment to Deposit Account Number 50-0238 for US010142

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any additional fees, including, but not limited to, the fees under 37 C.F.R. §1.16 or under 37 C.F.R. §1.17.

Respectfully submitted,



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Certificate of Fax Transmission

I hereby certify that the present Response is being transmitted to the United States Patent & Trademark Office at (571) 273-8300 on December 5, 2005.



William S. Francos

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